

WHAT IS CLAIMED IS:

1. A transparent, fire resistant, polycarbonate composition comprising: (a) polycarbonate formulation, and (b) a cyanoacrylic ester.
2. The composition of claim 1, wherein the polycarbonate formulation comprises a polycarbonate having a molecular weight in the range of from 5,000 to 100,000.
3. The composition of Claim 2 wherein the polycarbonate has an average molecular weight of about 10,000 to about 65,000.
4. The composition of Claim 3 wherein the polycarbonate has an average molecular weight of about 15,000 to about 35,000.
5. The composition of claim 1, further comprising a salt-based flame retardant selected from the group consisting of alkali metal salts of inorganic protonic acids, alkaline earth metal salts of inorganic protonic acids, alkali metal salts of organic Bronsted acids, and alkaline earth metal salts of organic Bronsted acids.
6. The polycarbonate composition of claim 5, wherein the salt-based flame retardant is a sulphonate.
7. The composition of claim 5, wherein the sulphonate salt is selected from the group consisting of potassium diphenylsulfon-3-sulphonate and potassium-perfluorobutane-sulphonate.
8. The composition of claim 1, wherein the cyanoacrylic ester is selected from the group consisting of 1,3-bis-[2'-cyano-3',3'-diphenylacryloyl)oxy]-2,2-bis-([2-cyano-3',3'-diphenylacryloyl)oxy]methyl)propane; ethyl-2-cyano-3,3-diphenyl acrylate; and 2-ethylhexyl-2-cyano-3,3-diphenylacrylate.

9. The composition of claim 1, further comprising a phenyl-siloxane.

10. The composition of claim 1, further comprising a phenyl-siloxane and a sulphonate salt.

5 11. The composition of claim 9, wherein the phenyl-siloxane is selected from the group consisting of poly(methylphenylsiloxane) and octaphenylcyclotetrasiloxane.

10 12. The composition of claim 9, wherein the poly(methylphenylsiloxane) has a viscosity of about 1 to about 300 centistokes.

13. The composition of claim 1, wherein the cyanoacrylic ester is 1,3-bis-[2'-cyano-3',3-diphenylacryloyl)oxy]-2,2-bis-([2-cyano-3',3'-diphenylacryloyl)oxy)methyl)propane.

15 14. The composition of claim 1, wherein the cyanoacrylic ester is ethyl-2-cyano-3,3-diphenyl acrylate.

15. The composition of claim 1, wherein the cyanoacrylic ester is 2-ethylhexyl-2-cyano-3,3-diphenylacrylate.

16. The composition of claim 1, wherein the composition is essentially free of chlorine.

20 17. The composition of claim 1, wherein the composition is essentially free of bromine.

18. The composition of claim 1, wherein the composition has a UL94 V0 rating for flame retardance at a thickness greater than or equal to 2.6 millimeters.

19. The composition of claim 1, wherein the composition has improved flame retardance relative to a polycarbonate composition without a cyanoacrylic ester.

20. The composition of claim 1, wherein the composition has improved weathering and flame retardance performance relative to a polycarbonate composition without a cyanoacrylic ester.

21. The composition of claim 1, wherein the polycarbonate formulation is present in an amount of from 70 weight percent to 99.9 weight percent, and where the cyanoacrylic ester is present in an amount of from 0.01 weight percent to 10 weight percent.

22. The composition of claim 1, wherein the polycarbonate formulation is present in an amount of from 70 weight percent to 99.9 weight percent, and wherein the cyanoacrylic ester is present in an amount of from 0.01 weight percent to 0.5 weight percent.

23. A method to improve the flame retardance of polycarbonate compositions, said method comprising adding to a polycarbonate formulation from which a polycarbonate composition is produced an amount of a cyanoacrylic ester effective for improving the flame retardance of said polycarbonate composition relative to the flame retardance of the polycarbonate composition without the cyanoacrylic ester.

24. A method to improve the weathering and flame retardance performance of polycarbonate compositions, said method comprising adding to a polycarbonate formulation from which a polycarbonate composition is produced an amount of a cyanoacrylic ester effective for improving the weathering and flame retardance performance of said polycarbonate composition relative to the weathering performance of the polycarbonate composition without the cyanoacrylic ester.

25. An article of manufacture comprising the polycarbonate composition of claim 1.

26. An article of manufacture comprising polycarbonate composition prepared by the method of claim 23.

5 27. An article of manufacture comprising polycarbonate composition prepared by the method of claim 24.